EWP

Enhanced Work Planning
Implementation Training

INSTRUCTOR'S GUIDE

WELCOME...

This is the Instructor's Guide for the Enhanced Work Planning Implementation training course. You will find this guide valuable in your preparation and delivery of the training.

Before you do anything else, read through this entire guide to become very familiar with it. After reading the guide, you will then be ready to go through the steps outlined below to successfully implement the course.

GOAL...

The goal of this training is to:

Train an EWP Core Team on the elements of EWP and how to implement them to identify, evaluate, and improve the work requesting/planning/execution process. The EWP Core Team will then understand that EWP is NOT the process that plans the actual work, but IS the process that evaluates and improves the program by which we manage the planning and execution of work.

OBJECTIVES...

At the completion of this training, EWP Core Team members will be able to:

1.   **Discuss** the history of the EWP program and how EWP relates to the mission of their facility.

2.   **Discuss** why they were selected to be a part of an EWP Core Team and how to effectively function as a team member.

3.   **Discuss** the roles and responsibilities of an EWP Core Team.

4.   **Demonstrate** how the five elements of EWP relate to implementing EWP, using a case study exercise that requires enhancement of the described work process.

5.   **Describe** common barriers to efficient and effective implementation of EWP.

6.   **Discuss** EWP products, practices, and tools developed at other facilities or sites.

7.   **Discuss** the effective use of performance indicators.

8.   **Describe** their role as a mentor/coach in implementing and refining EWP at their site.

9.   **Discuss** how to determine when EWP elements are institutionalized at their facility.

MATERIALS...

The following materials will be needed to implement this training:

- Instructor's Guide
- Handouts
- Overhead projector
- Overheads
- Puzzle

- Flip chart paper and pens
- Nails and board
- Posters.

PREREQUISITES...

The following should be completed before attending this course.

- Each person should have already attended course 2 EWP Fundamentals
- The core team should have an established goal.

FACILITATE THE ACTIVITY...

Before you begin the training session, familiarize yourself again with the Instructor Guide. Do not read verbatim from it. Use your own words while still covering the content.

This training will take about eight hours to complete.

The Instructor's Guide contains icons to visually cue you to what is happening next. Below is the legend to these symbols:

Show an Overhead: The "X" will be the number of the slide you are to show.

Handout: The "X" will be the number of the handout you are to distribute.

Activity: A brief activity that illustrates a point.

Flip Chart: Write or display points on flip chart paper.

Question: Ask a question of the participants.

Instructor Note: An important note to you, the instructor.

Important Point: A key point or statement that the participants need to remember.

Poster: Display or refer to a poster.

Site Specific Information: Relate information from the site where the training is being presented to the topic at hand.

The lesson plan is divided into two columns. The column on the left, **INSTRUCTOR / PARTICIPANT ACTIVITY**, will contain the above icons and other explanations that will direct you or the participants to some action.

Content that you will actually say will be in italics under "**DISCUSSION POINTS**." Further explanations and details will also be under this column.

INSTRUCTOR / PARTICIPANT ACTIVITY	DISCUSSION POINTS

MODULE I. INTRODUCTION (15 minutes)

Cover slide

Welcome everyone to the Enhanced Work Planning Implementation training course.

Instructor introductions

Introduce yourself (and the co-instructor(s), if applicable), write name(s) on flipchart or whiteboard and provide any relevant personal information to help establish creditability. Other instructors will introduce themselves as they begin teaching. (TURN OFF THE OVERHEAD)
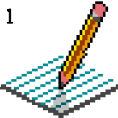
Distribute roster.

Inform class of housekeeping items.

Important **housekeeping** items are:

Location of restrooms, coffee, vending machines, etc.

Break times

Pertinent emergency procedures for that classroom

Lunch hour

Parking Lot

"*Questions will be entertained any time during the course. Any questions not immediately answerable will be recorded in a 'parking lot' so they are not forgotten and can be answered*

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later."

Class introductions

Each **class participant** will **introduce** him-or herself including job title or position. Briefly reinforce each participants reason for attendance as a function of the enhanced work process (i.e., a Crafts person is included to satisfy Worker Involvement and Organizationally diverse teams).

Icebreaker- puzzle pieces

Distribute puzzle pieces to each participant informing them that they can only relinquish them by recognized participation. It is anticipated that there will be more pieces that participants so the instructor will have to determine exceptional class participation or insight and award extra pieces. The team leader(s) is/are responsible for assembling the puzzle. All the puzzle pieces form the EWP logo.

"*Just as your active participation is vital to the success of your team, it is also paramount to the benefits derived from this course*."

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MODULE II. Course Goal and Objectives (15 minutes)
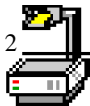
Goal 1

Overall course **goal** overhead

"*This is the overall goal for this course.*"

Read the goal aloud. (Point to the definition of EWP on the poster and make a tie with the goal and make sure everybody understands the definition of EWP.)

Goal 2

"*The EWP core team will then understand that...*" switch to the next overhead and finish reading the overall goal.

Objectives

"*In order to reach this goal, we have developed these objectives to keep us focused.*"   Read each objective.

Point out the **elements** poster and explain how the elements promote enhancement and are tools to promote safer, faster, better and cheaper work. Briefly explain each element, and make sure everybody understands the elements. (Each student should know about the elements from attending course 2, this is just brief reinforcement.)

Instructor's Guide

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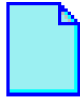
Point out the course **overview** poster and as each area is
discussed, you will check the box.

Discuss EWP Training Program. Inform the participants that the
intended audiences for courses 1, 2, and 3 and their goals.
Remind the class that they should have completed course 2
before attending this course.

Remember to actually check each area off when complete.

Turn some time over to the **team leader(s)** and ask them to
describe the team goal and to have their team members describe
their perceived role toward achieving that goal. Help the team
leader as needed.

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MODULE III. MOTIVATION (15 minutes)

You must "**speak from the heart**" during this motivation

section. Refrain from using overheads or consulting the lesson

plan during this discussion, to lend credence to what you are

saying..

A.   Brief **History**

Remember to direct focus on the process not the person (i.e.

planner)

"*Prior to Enhanced Work Planning (EWP), the process used to*

plan work was generally performed by a planner with little or

no interface with support organizations, including safety or the

work force other than to seek approval. This process created

incomplete, confusing, inaccurate, and inconsistent work

packages or work instructions. This was a direct result of a lack

of understanding of what was to be done, when, and by whom.

This created delays and stoppages in work execution and led to

a lack of faith by the craft or wage in the safety analysis

program or work control process."

B.   Shrinking **Budgets**

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"We are all experiencing a period of shrinking budgets and shifting missions and priorities and can ill afford any inefficiencies. For 40+ years, we had a different mission in support of the 'cold war' and we did it extremely well, in the time of cold war budgets we all prospered but now our mission has changed."

"We must now consider how what we do or do not do affects our environment. Not that anyone intentionally harmed the environment in the past, but we understand our environment and its delicate balances much better now. We also have a better understanding of chemical safety and the long term effects of exposure to certain chemcials."

C.   **Safety and Productivity**

"We must be able to adapt to new ways of getting the job done safer, quicker, and cheaper."

D.   **Competition** From Private Industries

"Experience, past productivity, and safety excellence help separate us from privatization, but the gap is narrowing."

E.   **Grass Roots** Initiative

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"EWP started out as a DOE initiative, which was championed and taken over by the sites. It continues to exist and grow today because it is a safer, better, and more cost efficient way to do business."

F. **Why Selected** - Program Only As Good As Its Implementation

"All of you in this class today were selected for your position in the formal work planning process as knowledgeable, required members of the EWP Core Team. Your participation on this team allows you to share your "corporate knowledge," build assurance into the program, and help propagate a consistent work process from facility to facility. However, you should not harbor a 'show me' attitude but should portray a 'watch me' attitude toward your team goals."

Further stress that they have been given a very unique **opportunity** to actually change things for the better without being "ordered" to do it. Make sure they understand that their accomplishments as a core team will improve safety, increase productivity, and positively contribute to the future of their facility and site

G. **Why EWP**?

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"So, how have we managed to do without EWP for 40+ years and still enjoy the safety record that we have? The answer is PEOPLE! Conscientious, knowledgeable people who built the facility and/or have worked there all their lives and know what has to be done to be safe. The "old time" planners know who to consult, the "seasoned" supervisors know what has to be reviewed, and the workers that built the facility know how to safely accomplish the required tasks independent of the procedure."

"Unfortunately, the 'all knowing' workforce is retired or nearing retirement, and their knowledge is leaving with them. It's not that the 'new replacements' don't want to do well, they don't have the corporate knowledge of their predecessors, and therefore they have to rely on procedures to keep the facility safe."

"Additionally, EWP assists the ' next generation' by providing the medium to bring all the craft and support organizations into the work planning process."

Why **EWP** for **your site**? Add a few site specific remarks.

"Are there any questions about what has been covered so far?"

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MODULE IV. Roles and Responsibilities of the Core Team in Implementing EWP (2 hours)

Inform the class that the next session will deal with applying EWP to an actual situation. Furthermore, you will lead them through the implementation process found in their student workbooks.

Briefly discuss the general implementation process using the poster on the wall.

"Determine "AS-IS"

Multi-functional team members conduct interactive discussions of work processes to gain understanding of how work is currently performed. Scope of review addresses how work is identified, planned, approved, controlled, and executed. Remember, the "AS-IS" is really "ACTUALLY-IS" not what you think it is.

AS-IS review may be accomplished by:

- *a team meeting of representatives*
- *developing a checklist and interviewing personnel*
- *reviewing assessment reports*

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- *reviewing employee suggestions*

Determine Strengths and Weaknesses

Critically evaluate information on how work is accomplished, identifying effective practices, barriers to efficient completion, organizational interfaces, and understanding of procedures and practices that impact the completion of work.

Determine Whether Process Enhancements are Warranted

Based on the team understanding of the strengths and weaknesses and the potential for meaningful, worthwhile improvements, the team decides if the existing process should be enhanced. The team needs to consider the potential benefits of changes and the costs to implement.

Set Goals and Develop Performance Indicators

The team establishes goals for the EWP program to address opportunities for improvements in efficiency, productivity, safety, and environmental compliance. Existing or new performance indicators are used to determine the baseline conditions and to measure the impact of the implemented enhancements.

Benchmark Current Conditions

The EWP team compares current practices with similar practices at other complex organizations in order to note how

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others have dealt with similar issues. Successful tools and

processes developed through EWP at other facilities are

reviewed for possible application. Consult the EWP Cross

Pollination Document and contact personnel at other sites to

discuss experience.

Determine "SHOULD-BE" Process

The EWP team determines what characteristics and

requirements the enhanced process should possess

incorporating EWP principles including a graded approach

based on risk and complexity of the task and the skill/training

level of the workers.

Develop Implementation Plan

The EWP team develops an implementation plan and schedule

including required resources and implementation costs for

management review and approval. The plan identifies the

responsible lead person and other resources for completion of

the actions defined in the plan. Items such as procedure

changes, development of tools, and training on changes need to

be considered.

Implementation Enhancements

Using the approved plan the changes to the work process are

implemented in the field including the required training of

personnel. Depending on the complexity of changes, it may be

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appropriate to pilot changes in one area to validate the process before full scale implementation. The same team that developed the changes should assist with the implementation.

Evaluate Effect of Process Changes

The EWP team participants in evaluating the process changes using information from performance indicators. By comparing results from the new process to the previous baseline condition, the effect of the changes are evaluated and further process improvements can be considered.

Closure

The EWP process is considered completed when the enhanced process implementation is finished and the line management accepts full responsibility for the process. The on-going performance continues to be monitored by the performance indicators and management uses self assessment for identifying need for future enhancements.

Inform the class that for the next hour or so you will **lead** them through the **implementation** process in preparation for the case study which they will accomplish on their own. Your role in the "guided implementation" will be as "team leader".

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IV. Roles and Responsibilities

A.   Baseline Current Work Control Practices (AS IS)

Refer to sample narrative in student packet (also found in the Instructor Reference section) and allow class about 10 minutes to read.

Flow diagram

Show overhead of AS-IS work planing flow while the class is reading.

Read narrative and explain flow diagram overhead to make sure everybody understands the AS-IS.

Given the sample situation, ask each team member why they think they are on the team. (Relate to elements as much as possible.)

"*Although we have provided this as a sample situation, do you feel this problem could actually exist*?"

Although the "AS-IS" has been provided in the handout, remind the class that they will have to **determine** their own "AS-IS" for their assigned process. Help them by **providing questions** that they will need to think about when they determine their own as is: Who starts the process? Do you use formal work requests or

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the good ol' boy method? Do your crafts people do favors for

the work force and no procedures get used? Do you find

yourself allowing no procedures because the workers in question

built the facility 40 years ago and don't need a work request to

tell them what to fix? Are any work requests or actual work

generated from a deficiency log? What happens if there is a

mistake or problem discovered during the review process?

Stress that AS-IS is actually "REALLY-IS" in other words, not

how you think it is but how it <u>actually</u> works.

Ask class for possible ways to determine AS-IS.

 Write down class
responses.

Discuss the methods to determine AS-IS

AS-IS methods   B.   Strengths and Weaknesses of the Current Work Control

Process.

The **class will now provide** strengths and weaknesses of the

 Write down class   "AS-IS" process. Provide one or two responses from the

responses.   Instructor Aids package.

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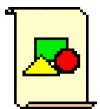Encourage brainstorming by teams; try to encourage **team leaders** to lead discussion. Be prepared to provide thought provoking terms such as "line vs. staff, number of signatures, degree of worker involvement, who generates permits?"

After the discussion starts to die off, walk over to the five elements chart and have the class evaluate processes in terms of the **five elements of EWP** if they haven't already done so.

Remember, just because a process has not been enhanced by EWP does not mean it doesn't have strengths. Allow the class to reevaluate their lists if needed.
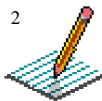
Show strengths vs. weaknesses overhead and distribute handout.

stren. V weak.

While showing overhead, stress that these are only examples and what the class came up with is just as good.

C.   Identify Issues and Functional Areas that May Warrant Enhancement.

"*As we begin to look at the areas that may need* **enhancement**, *I want you to remember two things. Don't fix it if it isn't broke. And, if it isn't broke, break it!*"

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Don't immediately explain the two contradictory terms, let the class mull them over and hopefully begin their own discussion or challenge you, the instructor. If the class challenges you, turn the question around and use the team leaders to lead the answer session.

The first statement means that if it works and fits reasonably well with the elements of EWP, leave it alone. The second statement means to not be satisfied with "this is the way we always do it." Keep a questioning mind. Think "Why EWP." Ask yourself, "What's wrong with this picture?"

"*How do you determine when EWP is warranted?*"

The answer to the above question is: Depends on **safety**, **efficiency**, and **cost**. **Remember, "enhance" does not mean additional, it could also mean less**.

Enhancement

Conditions

D.   Establish **Performance Indicator AS-IS** condition

"*Once you have decided what you want to enhance, you must establish where the process is, so you can generate Performance Indicators to tell you if you are successful. As an example, if you decide to change the review process to the team concept, find out how long it takes a package to be reviewed and*"

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approved now and after enhancement."

E.   **Review and Evaluate** Work Control Processes from Other Sites and Facilities.

Explain how to Benchmark other processes

"*What you will be doing is looking at similar processes at other sites, i.e., maintenance, waste management, operations, training, etc., and look at how your weaknesses can be improved on by what other sites have done. Each member on the team can be used to benchmark either formally or informally.*"

Show the class how to use the **Cross Pollination Summary document**. Actually pick out one or two tools/products that can be used for their specific needs.

"*There are other avenues available to exchange information about the EWP program, such as conference calls, work shops, and visits to other sites (use site DOE EWP rep for setting up tour).*"

F.   Develop <u>New</u> Work Flow Diagram, "SHOULD BE"

Stress to the class the importance of incorporating the five elements of EWP when developing the "SHOULD BE"

"*Think of all the organizations involved in your process and*

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include them in your "SHOULD BE." Remember to use a
Graded Approach *when involving all of your support*
organizations. Usually, only one craft is used on the teams to
represent all crafts, but in the work process you might want
every craft represented, depending on the complexity of the
process."

Be sure to ask **probing questions** while each group is working
on their new process to ensure they know what they are doing
and are committed to improve things. Ask such questions as,
"Are you sure you can get all these people in one room with the
Medical folks? Are you sure you want QA here? Why do you
want medical? Are the craft foreman going to let their workers
attend this meeting instead of work?" And ask other questions
as you see fit.

Use provided "SHOULD-BE from the Instructor Reference
section package to generate discussion as needed.

Discuss the sample "SHOULD-BE" overhead and distribute
should-be handout.

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Should-be

G.   Develop **Implementation** Plan

The Implementation Plan depends upon the complexity of the identified enhancements. It could require proceduralizing the changes, developing timetables, and/or retraining the workforce.

Ask **questions** concerning management commitment, requirements, resources, schedule, costs, approvals, cross-organizational considerations, performance indicators, and projected benefits while the class is developing a simple implementation plan.

"*Here is a **sample implementation plan** taken from the EWP Implementation Kit.*"

Describe and discuss the implementation plan in detail. Stress the importance of getting it right the first time, receiving line management buy-in up front, and balance timeline vs. resources.

"The Implementation Plan, for the example, may be no more than train a planner and evaluate the results.

Sample implementation plan

Discuss actual facility/site implementation plan if applicable

H.   Implement

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Follow the implementation plan, which should answer all questions concerning timing, resources, procedures, etc.

"**Who** implements and **how**?"

This should be defined and approved in the plan.

I.   **Evaluate** the Effect of Changes Due To Enhancements.

"*Here you will be using performance indicators. You have to know where you are or were before you can find out if you are where you want to be. The indicators must be measurable and meaningful. Remember the five elements when developing performance indicators. A detailed discussion on performance indicators will occur later.*"

J.   **Closure**

"*What does EWP become? Self-assessment is the logical end to EWP. EWP itself is "self-canceling" by its own nature of being a process to enhance a process. Once the process is enhanced, EWP in that form ceases to exist.*"

Recap the process by going to the implementation process wall chart.

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MODULE V. Team Development and Exercise (60 minutes)

A.   Team **Development**

"*I want to take a little time and discuss teams and how they function. Casey Stengel, a famous professional baseball manager from long ago, once said, 'You can get good players, gettin' them to play together, that's the hard part.' Teams are not fully effective when they first come together.*"
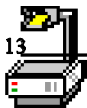
4 stages

"*These are the four stages of team formation. Forming, Storming, Norming, and Performing.*"

See the Instructor Reference section for detailed descriptions of the four stages.

Effectiveness factors

"*These are the Team effectiveness factors.*"

See the Instructor Reference section for detailed descriptions of the effectiveness factors.

"*Each of these effectiveness factors support stages of team development.*"

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	See the Instructor Reference section to provide a performance indicator example and then help the team develop a performance indicator they can apply to themselves to evaluate their progress as a team.
Hold up the Team Training Toolbox	"*This is the Team Training Toolbox. Each Team Leader will receive one of these. This toolbox contains a definition, possible solutions, and brief activities for each team effectiveness factor. This can be used when the team is failing or having problems in one of these areas.*"
	If time permits, select a simple exercise and showcase a chapter for the class
Conduct Nail exercise	Description is in Instructor Reference section. After conducting the exercise, point out that during the exercise they went through team stages and that if they copy another teams solution, it is part of what EWP is based-on. Use what works.

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MODULE VI. Case Study (1 hour and 30 minutes)
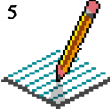
Introduce the case study. Use naarative found in the Instructor Reference section

Facilitate as needed to keep this case study moving.

A.   Set Conditions

AS-IS work planning

Keep the discussion going with teams. Once they get to "SHOULD-BE", make sure they cover who is organizationally responsible for every "box" and what the responsibilities are. They should also present this information to the class.

Strengths & Weaknesses

Call attention to the flow chart and description for case study in the Student Handouts.

B.   Team Leaders

"*Team Leaders, you will now lead your team through this case study of Facility B in the same manner that we all went through the last case study. This will take about 45 minutes to one hour.*"

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The instructor is to evaluate team skills using checklist from the

Instructor Reference section.

After the time is up, ask each Team Leader to present and

defend the enhancements of the work process to the class.

C.   **Review**

Review each presentation briefly with the class. While doing so,

address how the solutions addressed the five elements of EWP.

Briefly discuss the "SHOULD-BE" with the class.

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MODULE VII. Application of Problem Solving Skills and Effective Team Participation (15 minutes)

A.   **Impressions** of the Team's Effectiveness

"*How do you think you functioned as a team throughout the case study? Do you think you were effective? Where could you have done better*?"

Discuss this for about 10 minutes. Let the class bring up areas. Hint at areas that you observed that were good and bad if necessary to help the discussion.

Accept answers from the group

These other questions can be used as needed for the discussion. "Which stage of team building do you think you got to? What was your team goal? Did your leader take charge? Did everybody on the team participate?

B.   **Debrief** with the Checklist

Use the checklist to go over with each team how you felt they did. Be prepared for conflict and bruised egos, but stand by the

checklist and share with the class that this is only your

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impression of their skill as a team.

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MODULE VIII. Discuss Barriers to Efficient and Effective Implementation of EWP (45 minutes)

List responses on
flip chart

*"Let's **list** some of the **barriers** that you may or already have come across at this site to effective implementation of EWP. Examples may include: Line management feels no loyalty and is 'too busy,' EWP is looked at as another ' flavor of the month,' resistance to change at any cost."*

Take responses for 5 minutes.

"How do we overcome these barriers that are listed here? I gave you some common problems. Solutions to those problems may be (1). line management buy-in up front or, (2). showing a proven record of improved safety, efficiency, and productivity with EWP. Others may include a demonstrated relationship with other initiatives and how it provides support to them; bottom-up or top-down implementation, depending on circumstances; The premise that "the worker is not broke, the system is!" What are some ways to overcome the barriers that you have listed and keep in mind the five elements of EWP."

Discuss answers for a few minutes.

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8

"Here are some identified barriers from across the complex,

using the five elements of EWP, how could we overcome them?"

19   20

Discuss and compare with answers from the class.

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MODULE IX. EWP Products, Practices and Tools Developed at Other Facilities or Sites (15 minutes)

"*Ongoing communication and networking are critical to ensure that sites experience the full benefits of EWP applied to all work performed within DOE. Many tools and processes are available which enable sites to achieve work results faster, better, safer, and cheaper. This handout describes many of these tools. We'll briefly go over this.*"

"The EWP home page makes EWP information available to countless people across the DOE complex. New information will be added regularly. You should check this site out often."

"The EWP Implementation curriculum is focused on understanding and applying key EWP principles as well as providing an avenue for each site to tailor the curriculum to meet its specific needs. Three courses will be available in August of 1997."

"*Periodic and regularly scheduled teleconferencing meetings are held to provide a forum for topics of general interest.*"

"*In your student packet under cross pollination summary there is a matrix of tools, products and practices found at other*

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sites."

*"The matrix is easy to use, and I'll grab a few examples here
based on our discussion today.*"

Select a few examples based on class-defined problems from
earlier discussions; explain how the matrix works and how to
obtain information from other sites.

*"The EWP Steering Committee sponsor periodic EWP
counterpart meetings and workshops for more intensive
interaction among EWP site representatives.***"**

*"Assistance for EWP specialists is provided to ensure that sites
are taking full advantage of the various aspects of EWP."*

*"It is important to keep the information flow going both ways.
As you come up with new products, tools, or processes, please
share them with the rest of the complex.*"

Skill of the craft. *"This is meant to indicate graphically that an
idea originated in Idaho, was sent for use and improved at
Fernald, and resent back to Idaho along with initially sending
to Mound. This is an excellent example of the sharing of ideas,
products, and tools throughout the complex made possible
through EWP. The important thing is that all the sites are*

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communicating and no single site is left to "reinvent the wheel"

if it exists somewhere in the complex."

Discuss site specific "tools" if applicable

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MODULE X. Performance Indicators (30 minutes)

"The objectives of this next module are to explain what Performance Indicators are, why we need them, how to establish them, and how they can help us integrate DOE programs and Initiatives in a national level across the complex."

A.   Review definition of Performance Indicators

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P.I. definition

"Although they are referred to as indicators, measures, or metrics; Performance Indicators, as defined and used in the Enhanced Work Planning process, are the
***'qualitative and quantitative basis by which objectives are established and performance towards reaching a goal is assessed and gaged**.'"*

"Regardless of what they are called, it is what they do for us that is important. Performance Indicators help us control the process. We must have a means to tell if we are safer, faster, better, cheaper or as importantly, if we are not."

*"Performance Indicators **measure and defend progress** , show*

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What are PI's

support and integration into Site and Complex-wide missions, *provide data* to set an improvement course, and ultimately function as a *tool to change behavior*. Taken alone, Performance Indicators are meaningless, they must be carefully tied to an attainable goal and expressed in units of measure that are understandable by everyone associated with the process."

B.   Why are they needed

"Why do we need Performance Indicators?"

Accept answers
from class

"*If you are not keeping score, you are just practicing*."

Why P.Is?

"1.   **Management Assessment** -Is EWP meeting its objectives and goals? Is there clear evidence of the application of the elements of EWP? Is it paying for itself? (Fernald experienced an 11 to 1 payback on resources expended on EWP)

2.   **Defensible Measurement of Success and Accomplishment-** "Nothing succeeds like Success" Meaningful PIs can <u>prove</u> that the EWP program is accomplishing its goals.

3.   **Self-Assessment** -How well are our "enhanced" processes meeting their goals? Are they truly safer, better, faster, and/or cheaper?"

"4.   **Continuous Improvement** -What are the weaknesses,

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trends, efficiencies, and opportunities for improvement?

5. **Show Integration into other Site/Complex goals and/or initiatives-** *EWP PIs should support other PIs used to measure the Site's performance such as an ISMS.*

Each ISMS should include a process to identify performance measures including safety performance measures for the work. These performance measures should 1) Provide information that is truly a direct indicator of how safely the work is being performed 2) be clearly linked to the performance objectives and 3) be performance based.

An example might be an EWP Indicator measuring "worker involvement in work planning" should be shown as linked to a more established site indicator such as 'maintenance cost per square foot.'

See the Instructor Reference section for classic EWP Performance Indicators and specific examples to share with the class

C.   Who uses PIs?

Who uses PIs

"-Site Management- determine status of "global" processes such as implementation of VPP, D&D 25% of Site by 1999, reduce loss-of-time accidents, reduce equipment downtime by

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25%, eliminate work stoppages due to work package errors or omissions, etc. Any of you who have been in any of these Managers offices can attest to the fact that his/her walls contain PI charts indicating progress towards corporate goals.

-Line Management determine status of facility or work group specific processes such as: reduce "dead time" for crafts by 10%, reduce D&D costs for facility A by 15%, reduce number of unforeseen field changes to work packages by 50%, increase "chargeable" time for workforce by 25%/reduce overhead charges by 25%, etc. Here again we will find PIs being tracked on charts in the foreman's office only more facility specific.

-Crafts determine status of worker specific processes such as: manage reportable workplace accidents to zero, reduce work stoppages by 75%, reduce number of crafts maintaining asbestos worker qualification by 10%, reduce average time to effect needed work package changes by 25%, etc. The PIs associated with the Crafts typical show up site wide with large signs or entire bulletin boards indicating progress towards goals such as reduced workplace accidents.

-Support Organizations- determine degree of involvement and/or support of the actual work by organizations such as Safety&Health, Medical, QA, and training. Here we could see: # packages reviewed by Support Organizations, # unforeseen

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*work stoppages, # work packages requiring training
involvement, reduce average size of work packages by 35%,
reduce amount of annual retraining required by 25%, etc.*

*The bottom line is **EVERYBODY** uses PIs or should use or be
aware of how their job affects PIs.*

*However, many of these examples can be a double edged sword.
As an example, we may have to make work packages longer if
we discover we are not applying the right amount of rigor for
the hazards involved. To prevent these type situations, PIs
MUST be tied to attainable goals!***"**

Ask if there is anybody in class who thinks their particular "job"
has no effect on any PIs. Be ready to relate their job to
numerous PIs using the examples provided above.

D.   How do we establish and use PIs?

"*1.   Establish **baseline***-You have to know where you are
*before you can begin comparisons. Caution: Be sure
you obtain an actual baseline, not what it is supposed to
be.*

How to establish

*2.   Identify the **purpose** for the measurement-Why is this
data being taken, do we really need it?*

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3.   *Justify and set **goals**-What are we trying to*

prove/disprove? Why are we concerned with this goal?

4.   ***Scope** of Indicator-What are we going to gather data*

on? How much data?

5.   ***Collect** data-must be defensible, with the proper rigor*

applied through use of a graded approach to its

importance.

6.   ***Calculate** data-reduce raw data to useable, defensible*

measurements.

7.   ***Analyze** data-measure actual results.*

8.   ***Compare** actual results(measurements) to goal.*

Based on your results, you are ready to continue, alter course

slightly, or make major course change.”

E.   Is there a place for PIs that measure the subjective

elements of EWP?

“First of all, subjective PIs do not replace other PIs. Subjective

Performance Indicators allow managers and the workforce to

measure and understand attitudes and subjective conditions that

could be used to provide leading information of EWP progress

such as:

-    *Commitment to EWP implementation*

-    *Management sponsorship of EWP implementation*

-    *EWP communication of effectiveness*

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-       *Characteristics of a successful EWP program*

-       *Customer satisfaction with EWP*

-       *Cooperation between workgroups*

These elements are often not included in information systems because of the difficulty of measurement. One of the tools developed at PNNL for use in the EWP process has made this type of measurement possible. This facilitated process helps build and measure subjective PIs, identify possible applications for this tool in the applicant's organization, and provide an outline of the steps in the process. Upon completion of the workshop, personnel will have developed a subjective indicator of interest to the group and will be able to apply subjective techniques in their organization for use in the self-assessment process, obtaining consensus, and other applications. Contact Headquarters (EH-53) for more information on the "fuzzy" performance indicator workshop.

Some examples of subjective performance indicators include: quality, innovation, communications, morale, and efficiency.

F.   Coordinated Performance Indicators

"1.   *How do the Performance Indicators set to measure the EWP process for your particular project or facility coordinate and integrate with complex-wide and*

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program PIs?

2.   *How do they coordinate and integrate with other PIs set at your site? the DOE complex?*"

Hierarchy

Overhead explanation-DOE-HQ goal is to D&D 10% of complex by year 2000, Facility X's goal is to D&D Bldg. Y by year 2000. EWP program Goals become:

1.) *Reduce* D&D *Work Request time*

2.) Reduce Maintenance Work Request Time

3.) *Reduce time to route* D&D *Work Request. ...OR...*

DOE-HQ goal of 80% of Workforce involved with EWP/ISM by end of 1999.

Facility Y's goal is to achieve VPP STAR status by the end of 1999. EWP program goals become:

1.) 50% of workforce involved in EWP by 1998

2.) 100% of Workforce involved with EWP by 1999.

"3.   *A DOE-HQ Initiative has been launched to help EWP teams take advantage of Performance Indicators as a means to advance EWP goals. The EWP program has taken the initiative to help coordinate, consolidate, and refine site Performance Indicator programs. Once coordinated, progress towards complex-wide goals as defined by ISMS, VPP, etc. becomes easier to measure.*

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The needed data is already being collected at each site in various forms. Coordination of each sites data towards a national level will assist in focusing the efforts of the entire complex in the same direction."

F.   Conclusion

"*Have we met our objectives?*
We discussed the what, why and how of performance indicators.
We also discussed how they Support/Integrate global goals.

In conclusion, we have seen that we measure Performance Indicators for the following reasons:
-Measure and defend progress
-Show support and integration into site and complex-wide missions
-Provide data to set an improvement course
-Ultimately function as a tool to change behavior."

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MODULE XI. Mentoring/Coaching (5 minutes)

"As members of the core team, you are never really out of the picture. You will always be an SME. Mentoring and coaching is the avenue by which EWP becomes continuous improvement, thereby maintaining the new process."

"As team members you will continue to assist in implementation and refinement."

"You may be advocates of change, or SMEs to explain Internet access to information, or assist implementation into new areas/facilities, or as a team member you may become new team leader. These are just a few of several ways you may continually be involved."

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MODULE XII. Closure (5 minutes)

Closure

"Approval = Buy-in. You will know when EWP is in place and you are ready for closure when

1. *Line management has fully accepted ownership.*

2. *Elements of EWP are institutionalized*

3. *Enhanced process and products are implemented*

4. *Continous improvement process is in place*

5. *The EWP process is validated."*

"Team Leaders, I want you to discuss this question with your team and report an answer to the rest of the groups. Who determines when EWP is implemented?"

Have each group discuss for a few minutes then have each group report.

Discuss the site definition of "closure"

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MODULE XIII. Review (5 minutes)

"Here are the course objectives that we addressed at the first of the course."

Go over the objectives and point out on the course overview poster where in the course that objective was covered.

"Now, where do you go from here? What is your next step?"

Have Team Leaders discuss for a few minutes.

"You are now at the beginning. You have been empowered to help make things better. But now is the time to get started and 'think outside the box.' And remember the nail exercise and how many of you thought 'It can't be done!'"

Conduct half of eight exercise

Description is in the Instructor Resource section. This is an example of thinking outside the box.

"Half of eight is four, or it could be three or zero if you 'break tradition' and don't accept anything as the 'norm.'"

"Thank you for participating today. Please fill out a course evaluation form before you leave."

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